AM100246

WHAT IS CLAIMED IS:

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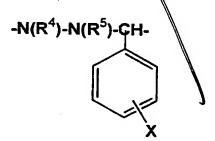
. . .

1. An ant controller characterized by containing, as active ingredient thereof, a hydrazine derivative represented by the following formula (I):

$$Z \xrightarrow{\text{N}(R^1)-C-A-C} \xrightarrow{\text{N}(R^2)} Y \quad (I)$$

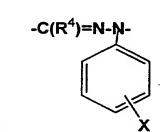
wherein A represents:

(wherein R^4 represents hydrogen atom or C_1 - C_6 alkyl group, and X represents 1 to 5, same or different substituents selected from the group consisting of hydrogen atom, halogen atom, C_1 - C_6 alkyl group),



(wherein R^4 and X are as defined above, and R^5 represents hydrogen atom, C_1 - C_6 alkylcarbonyl group or phenylcarbonyl group which may have 1 to 2, same or different substituents selected from the group consisting of C_1 - C_6 alkyl groups),

AI Cax



(wherein R^4 and X are as defined above), or

CH(R⁴)-NH-N-

(wherein R4 and X are as defined above);

 $R^{\frac{1}{2}}$ represents hydrogen atom or C_1 - C_6 alkyl group;

 R^2 and R^3 , which may be same or different, represent hydrogen atom, hydroxyl group, C_1 - C_6 alkyl group, C_1 - C_6 alkoxy group, C_1 - C_6 alkylcarbonyl group or phenylcarbonyl group;

Y represents 1 to 5, same or different substituents selected from the group consisting of

hydrogen atom, halogen atom, nitro group and cyano group;

Z represents halogen atom, cyano group, C_i-C_6 alkyl group, halo C_i-C_6 alkyl group, C_i-C_6 alkoxy group, halo C_1-C_6 alkoxy group, halo C_1-C_6 alkylthio group, halo C_1-C_6 alkylsulfonyl group; and

W represents oxygen atom or sulfur atom.

2. The ant controller according to Claim 1, which is represented by the following formula (I-1):

$$Z \longrightarrow N(R^1)-C-N(R^4)-N=C \longrightarrow R^2$$

$$(I-1)$$

wherein R² represents hydrogen atom or C₁-C₆ alkyl group;

R² and R³, which may be same or different,
represent hydrogen atom, hydroxyl group, C₁-C₆ alkyl

group, C₂-C₅ alkoxy group, C₂-C₆ alkylcarbonyl group or

phenylcarbonyl group;

 R^{4} represents hydrogen atom or C_{1} - C_{6} alkyl group;

X represents 1 to 5, same or different substituents selected from the group consisting of hydrogen atom, halogen atom, C_1 - C_6 alkyl group and halo C_1 - C_6 alkyl group;

Y represents 1 to 5, same or different substituents selected from the group consisting of hydrogen atom, halogen atom, nitro group and cyano group;

Z represents halogen atom, cyano group, C_1-C_6 alkyl group, halo C_1-C_6 alkyl group, C_1-C_6 alkoxy group, halo C_1-C_6 alkoxy group, halo C_1-C_6 alkylsulfinyl group or halo C_1-C_6 alkylsulfinyl group; and

W represents oxygen atom or sulfur atom.

3. The ant controller according to Claim 1, which is represented by the following formula (I-2):

wherein R^1 represents hydrogen atom or C_1 - C_6 alkyl group; R^2 and R^3 , which may be same or different, represent hydrogen atom, hydroxyl group, C_1 - C_6 alkyl group, C_1 - C_6 alkoxy group, C_1 - C_6 alkyl group or phenylcarbonyl group;

 R^4 represents hydrogen atom or C_1 - C_6 alkyl group;

 R^5 represents hydrogen atom, $C_1\text{--}C_{\tilde{e}}$ alkylcarbonyl group or phenylcarbonyl group which may

have 1 to 2, same or different substituents selected from the group consisting of C_1 - C_6 alkyl groups;

X represents 1 to 5, same or different substituents selected from the group consisting of hydrogen atom, halogen atom, C_1 - C_6 alkyl group and halo C_1 - C_6 alkyl group;

Y represents 1 to 5, same or different substituents selected from the group consisting of hydrogen atom, halogen atom, nitro group and cyano group;

Z represents halogen atom, cyano group, C_1 - C_6 alkyl group, halo C_1 - C_6 alkyl group, C_1 - C_6 alkoxy group, halo C_1 - C_6 alkoxy group, halo C_1 - C_6 alkylsulfinyl group or halo C_1 - C_6 alkylsulfonyl group; and

W represents oxygen atom or sulfur atom.

4. The ant controller according to Claim 1, which is represented by the following formula (I-3):

$$Z - N(R^1) - C - C(R^4) = N - N - C - C(R^4) = N - C - C(R^4) =$$

wherein R^1 represents hydrogen atom or C_1 - C_6 alkyl group; R^2 and R^3 , which may be same or different, represent hydrogen atom, hydroxyl group, C_1 - C_6 alkyl group, C_1 - C_6 alkoxy group, C_1 - C_6 alkyl group or

group

5.

phemylcarbonyl group;

R4 represents hydrogen atom or C1-C6 alkyl

X represents 1 to 5, same or different substituents selected from the group consisting of hydrogen atom, halogen atom, Ci-Ce alkyl group and halo C₁-C₆ alky¼ group;

Y represents 1 to 5, same or different substituents selected from the group consisting of hydrogen atom, halogen atom, nitro group and cyano group;

Z represents halogen atom, cyano group, C1-C6 alkyl group, halo C1-C6 alkyl group, C1-C6 alkoxy group, halo C:-C6 alkoxy group, halo C1-C6 alkylthio group, halo C_1-C_6 alkylsulfinyl group or halo C_1-C_6 alkylsulfonyl group; and

W represents oxygen atom or sulfur atom. The ant controller according to Claim 1, which is represented by the following formula (I-4):

wherein R^2 represents hydrogen atom or $C_1 - C_6$ alkyl group; R2 and R3, which may be same or different,

represent hydrogen atom, hydroxyl group, C_1 - C_6 alkyl group, C_1 - C_6 alkoxy group, C_1 - C_6 alkylcarbonyl group or phenylcarbonyl group;

 \mathbb{R}^4 represents hydrogen atom or C_1 - C_6 alkyl group;

X represents 1 to 5, same or different substituents selected from the group consisting of hydrogen atom, halogen atom, C_1 - C_6 alkyl group;

Y represents 1 to 5, same or different substituents selected from the group consisting of hydrogen atom, halogen atom, nitro group and cyano group;

Z represents halogen atom, cyano group, C_1 - C_6 alkyl group, halo C_1 - C_6 alkyl group, C_1 - C_6 alkoxy group, halo C_1 - C_6 alkylsulfinyl group or halo C_1 - C_6 alkylsulfinyl group or halo C_1 - C_6 alkylsulfonyl group; and

W represents oxygen atom or sulfur atom.

- 6. A method for application of an ant controller which comprises treating a wooden part and a surrounding soil where ants and termites live, with an effective quantity of the ant controller according to Claim 1.
 - 7. The method for application of an ant controller according to Claim 6, wherein the hydrazine derivative represented by the general formula (I) is a hydrazine derivative claimed in any one of Claims 2 to 5.

